

	Dynkin diagrams	Lie algebras	Lines	Polytope	
k= 0		A0 = U(1) = Spin(2)	0	0	U(1) of CP2 = SU(3) / SU(2) x U(1)
k= 1	○	A1 = SU(2) = Spin(3)	1	line segment	SU(2) of CP2 = SU(3) / SU(2) x U(1)
k= 2	○—○	A2 = SU(3)	3	triangle	SU(3) of CP2 = SU(3) / SU(2) x U(1)
k= 3	○—○—○	A3 = SU(4) = SU(2,2) = D3 = Spin(6) = Spin(2,4)	6	cuboctahedron diagonals	SU(4) contains SM SU(3) SU(2,2) = Spin(2,4) of Conformal Gravity + Dark Energy
k= 4	○—○—○ ○	D4 = Spin(8)	10	6+4 special lines of 24-cell	6 = cuboctahedron diagonals = SM SU(3) and CP2 or Conformal Gravity 4 = 3 + 1 where 3 = octahedron diagonals = space and 1 = octahedron displacement = time
k= 5	○—○—○—○ ○	D5 = Spin(10)	16 = D5 / D4xU(1) gives 8-dim Shilov boundary spacetime	Gosset 1_21	
k= 6	○—○—○—○—○ ○	E6	27 = J3(O) gives 8-dim spacetime + + 8 fermion particles + 8 fermion antiparticles	Gosset 2_21	
k= 7	○—○—○—○—○—○ ○	E7	56 = 28 + 28 = D4 + D4 = Standard Model + + Gravity and Dark Energy	Gosset 3_21	
k= 8	○—○—○—○—○—○—○ ○	E8	240 E8 / 112 D8 = 64+64 for 8 spinor fermion particles+antiparticles 112 D8 / 24 D4 x 24 D4 = 64 for 8-dim Kaluza-Klein spacetime	Wittig = Gosset 4_21	
			24 D4 contains 8-dim SM SU(3) of CP2 = SU(3) / SU(2)XU(1) 24 D4 contains 15-dim Conformal SU(2,2) = Spin(2,4)		

